

Fact Sheet



For Final Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-10900013-2007**
Application Received: **September 22, 2006**
Plant Identification Number: **109-00013**
Permittee: **Kepler Processing Company, LLC**
Facility Name: **Pocahontas No. 51 Preparation Plant**
Mailing Address: **P.O. Box 1392, Pineville, WV 24874**

Physical Location: Pineville, Wyoming County, West Virginia
UTM Coordinates: 449.67 km Easting • 4158.67 km Northing • Zone 17
Directions: From Pineville, WV, travel west on WV State Route 97 approximately three (3) miles. Facility is adjacent to Route 97.

Facility Description

The Pocahontas No. 51 Preparation Plant is a coal preparation plant with thermal dryer. It operates under SIC Code 1221 and has the ability to screen, break/size, wash, thermally dry, store, and load out/in coal. The maximum capacity of the preparation plant is 1,000 tons per hour of raw coal feed.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2005 Actual Emissions
Carbon Monoxide (CO)	135.73	3.83
Nitrogen Oxides (NO _x)	221.36	91.40
Particulate Matter (PM ₁₀)	158.99	29.33

Plantwide Emissions Summary [Tons per Year]		
Total Particulate Matter (TSP)	480.22	83.93
Sulfur Dioxide (SO ₂)	249.29	60.09
Volatile Organic Compounds (VOC)	147.77	61.84
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2005 Actual Emissions
Total HAPs	4.46	2.011

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 136 tons per year of CO, 221 tons per year of NO_x, 159 tons per year of PM₁₀, 249 tons per year SO₂, and 148 tons per year of VOC. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Kepler Processing Company, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR5	Operation of Coal Preparation Plants
	45CSR6	Open burning prohibited.
	45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Subpart Y	Standards of Performance for Coal Preparation Plants
	40 C.F.R. Part 61	Asbestos inspection and removal
State Only:	40 C.F.R. Part 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of

the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2104D	April 22, 2006	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

The changes to the February 13, 2002 Title V Permit and Fact Sheet and subsequent minor modifications *MM01* and *MM02* consists of the following:

45CSR13 – Permit R13-2104D – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation.*

This permit requires weekly visible emissions observations for the equipment with opacity limits and past Method 9 testing indicates opacity readings well below the 20 percent limit. Therefore the annual Method 9 testing will no longer be required.

This permit contains an administrative update which superseded and replaced permit R13-2104C. The amendment limits the Sulfur Dioxide emissions from the thermal dryer to 56.85 pounds per hour and/or 249 tons per year, and the maximum thermal dryer fuel rate to 105 mmbtu/hr. To demonstrate compliance with the fuel rate limit a "Riley #350" pulverizer is required to be used. This pulverizer will physically limit the fuel rate flow due to its maximum design capacity.

Compliance with the SO₂ emission limits will be demonstrated through fuel sampling and emission calculations. Compliance will also be demonstrated through the implementation of the 40CFR64 CAM Plan (see below).

40 C.F.R. Part 64 - Compliance Assurance Monitoring (CAM)

This facility has a pollutant specific emissions unit (PSEU) for sulfur dioxide (SO₂) meeting the applicability requirements of 40 C.F.R. §64.2 and therefore has submitted a CAM plan in accordance with the CAM rule.

The submitted plan meets the requirements of the CAM rule for the Wet Scrubber 0006 controlling SO₂ from the thermal dryer. The primary use of this scrubber is for particulate matter (PM) control. Its secondary function is for SO₂ control. Since the existing Title V permit specifies a continuous

compliance determination method for PM emissions, the scrubber is exempt from 40 CFR Part 64 per §64.2(b)(vi) for PM.

Monitoring per the CAM Plan for SO₂ emissions will be as follows:

Note: The corresponding permit conditions are italicized in parentheses.

	Indicator No. 1	Indicator No. 2	Indicator No. 3	Indicator No. 4
I. Indicator	Sulfur content of 1.18% (with heat content of 13,000 Btu/lb - (5.2.1.d.1.))	Maximum heat input of 105 MMbtu/hr - (5.1.1 & 5.1.2.)	Pressure drop - (5.3.3.)	Water pressure - (5.3.3.)
Measurement Approach	Coal is sampled daily, composited, and analyzed monthly for sulfur and heat content. - (5.2.1.)	Fuel usage is continuously monitored with a rotary counter. - (5.4.2.)	Pressure drop is continuously monitored. - (5.1.10. & 5.3.3.)	Water pressure is continuously monitored. - (5.1.11. & 5.3.3.)
II. Indicator Range	Maximum sulfur content is 1.18% with a heat content of 13,000 Btu/lb. As the heat content increases the allowable sulfur content increases proportionally. - (5.2.1.d.1.)	Maximum mass emission rate is 56.85 lb/hr with 12-month rolling total maximum of 249 tpy. - (5.1.13.)	An excursion is defined as pressure drop below 23 inches of H ₂ O. - (5.3.3.)	An excursion is defined as water pressure below 10.1 psi. - (5.3.3.)
III. Performance Criteria				
A. Data Representativeness	500 grams of coal will be sampled from a point where a representative sample can be obtained. - (5.2.1.)	Fuel usage is continuously measured with a rotary counter on a lbs/day basis. - (5.4.2.)	Pressure drop measurements are taken at the inlet of the scrubber and at a location between the scrubber and the mist eliminator. - (5.1.10. & 5.3.3.)	Pressure drop measurements are taken at the inlet of the scrubber and at a location between the scrubber and the mist eliminator. Water pressure is recorded before the scrubber. - (5.1.10. & 5.3.3.)
B. Verification of Operational Status	<i>Does not apply to existing non-modified monitoring equipment.</i>	<i>Does not apply to existing non-modified monitoring equipment.</i>	<i>Does not apply to existing non-modified monitoring equipment.</i>	<i>Does not apply to existing non-modified monitoring equipment.</i>
C. QA/QC Practices and Criteria	Sample preparation done according to ASTM method D4239. - (5.2.1.)	The operation of the rotary counter is verified by visual inspection. - (5.4.2.)	Calibration performed on the pressure drop recorder/monitor is performed as needed but at least once annually. Pressure drop is accurate within 1 inch of H ₂ O - (5.1.10.)	Calibration performed on the water pressure gauge is performed as needed but at least once annually. The water pressure gauge is accurate to within 5%. - (5.1.11.)
D. Monitoring Frequency	Daily - (5.2.1.)	Continuously monitored and total coal used is recorded at the end of each day. - (5.4.2.)	Continuously - (5.1.10.)	Water pressure monitored continuously. - (5.1.11.)
Data Collection Procedures	Coal samples are collected at a point where a representative sample can be obtained. They are prepared according to ASTM method D3177 - (5.2.1.)	Fuel usage is compiled at the end of each day - (5.4.2.).	Continuously recorded by strip chart and manually recorded once every 12 hours. - (5.4.3.)	Continuously recorded by strip chart and manually recorded once every 12 hours. - (5.4.3.)
Averaging Period	Coal samples are composited monthly - (5.2.1.)	Daily - (5.4.2.)	3-hour rolling average. (5.3.3.)	3-hour rolling average. (5.3.3.)

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 45CSR1 (NOx Budget Trading Program for Non-EGUs) - does not meet the definition of NOx Budget Unit
- b. 45CSR19 (Non-attainment NSR) - Not located in a non-attainment area or will not contribute to a violation of section
- c. 45CSR26 (NOx Budget Trading Program for EGUs) - not an EGU.
- d. 45CSR27 (Toxic air pollutants - BAT) – does not meet definition of chemical processing unit.
- e. 45CSR28 (Emission Trading and Banking) - not involved in this program.
- f. Section 112 (Hazardous Air Pollutants) - no MACT standard has been promulgated for thermal dryers.
- g. Section 129 (Solid waste combustion) - facility does not combust solid waste.
- h. Section 183(f) (Tank vessel standards) - no tanks/vessels utilized at this facility.
- i. Section 183 (e) - facility is not a regulated entity as defined by Section 183 (e)(C).
- j. NAAQS increments or visibility (temp. sources) – facility has no temporary sources.
- k. Federal Implementation Plan (FIP) - none in place
- l. Title IV of the CAA (Acid Rain) - not an EGU.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date:	December 27, 2006
Ending Date:	January 26, 2007

All written comments should be addressed to the following individual and office:

Frederick Tipane
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public

hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

As a result of comments received from USEPA, the following revisions have been made to the permit and fact sheet:

Permit condition 5.3.3. has been revised to include “based on a 3-hour rolling average” in the paragraph following the “frequency of testing” table;

In the “Note” under Section 5.0, “(*See fact sheet for CAM Plan monitoring table*)” has been added;

In the fact sheet CAM monitoring table corrections and/or additions were made to various references to the corresponding permit conditions. Also, the “Verification of Operational Status” row for each Indicator was revised to include the following replacement language: “*Does not apply to existing non-modified monitoring equipment.*”